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ABSTRACT

An ongoing longitudinal study, conducted by the Australian Council for Educational Research and Aboriginal consultants in 13 schools across Australia, is following the progress of a group of Aboriginal and Torres Strait Islander children in their early years of schooling. This report discusses findings from the first 2 years of the study. The schools were located in urban, rural, and remote areas of Australia; included both large and small schools; had at least five Indigenous students in their first year of schooling; and had an explicit focus on supporting Indigenous students' learning in the early years. The proportion of Indigenous students in each school varied greatly (5-100 percent). Data collection included assessments of students' literacy and numeracy at the beginning and end of each of the first 2 school years, observation, and interviews with teachers and principals. Overall, data were collected from 147 students and 36 teachers. Only 37 students completed all four assessments, but 98 completed more than one assessment. Quantitative data are reported in relation to a larger study with the same instruments. Qualitative data from two schools with effective practices focus on the schools' recognition of Indigenous cultures and languages, employment of Indigenous educators and staff, and good relations with Indigenous parents and communities. (SV)

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# DIVERSITY AND LEARNING IN THE EARLY YEARS OF SCHOOL

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**Abstract**

This paper reports on a longitudinal study being conducted by Australian Council for Educational Research (ACER) and a team of Aboriginal consultants in thirteen schools across Australia, which is following the progress of a group of Aboriginal and Torres Strait Islander children in their early years of schooling. The data collected includes measures of early literacy and numeracy, complemented by qualitative data gathered through interviews, questionnaires and observation. The paper will describe the diverse learning environments experienced by this group of children, and the many ways that schools and teachers are attempting to maximise effective learning environments for these children in their early years of schooling.

*The information contained in this paper is part of a larger research project. The authors wish to acknowledge other members of the research team: Pat Cummins, Paul Hughes, Natascha McNamara, Lee Simpson, Maria Stephens, Margaret Valadian, Mara West and Davina Woods. The authors also wish to acknowledge administrative and psychometric support provided by ACER colleagues, Nicole Fleming and Ken Rowe, as well as the advice and support the project receives from members of the ACER Aboriginal and Torres Strait Islander Education and Advisory Committee.*

## The critical early years

The significance of educational experiences for Indigenous children in the early years has been highlighted recently in a series of reports to an Indigenous Education Taskforce set up by the Ministerial Council for Education, Employment, Training and Youth Affairs (2000a, 2000b, 2000c). The reports note that while there have been some improvements in educational outcomes for Indigenous students in recent years, substantial gaps remain in educational access, participation and achievement of Indigenous students compared to non-Indigenous students. These differences emerge in the early years (0-8 years) and underlie continuing inequity at other major educational milestones.

In the early childhood years (0-8 years), Indigenous students are less likely to participate in pre-schooling than their non-Indigenous peers, they have higher rates of absenteeism beginning in primary school, and the early indications of their educational achievement, as measured by state-wide English literacy assessments, indicate that, as a group, they perform at a lower level compared to their non-Indigenous peers (MCEETYA, 2000a).

Children's learning experiences in the early years play a crucial role in setting foundations for lifelong learning and engaging parents in a lifelong relationship with their children's education. Educational experiences which support children to develop a strong self-identity are fundamental in establishing positive attitudes to self -as an individual and as a learner- and in developing future attitudes to schooling (Siraj-Blatchford and Clarke, 2000). Adams (1998) has argued that the poor educational outcomes of Indigenous students apparent in upper primary/lower secondary school are symptomatic of inadequate educational progress in

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the early years of schooling. While there has traditionally been a focus on educational outcomes for students towards the end of schooling, there is need to recognise the importance and equal status of each stage of schooling; the inter-relatedness of all stages and the responsibility incumbent in each stage to ensure a student's satisfactory progression during that stage and into the next.

Hence the focus of this study on the experiences of a group of Indigenous children in their early years of schooling.

**Background to the longitudinal study**

Prior to the commencement of the longitudinal study described in this paper, researchers at ACER conducted a project which explored the English literacy learning experiences of Indigenous students in 12 primary schools in Queensland, Western Australia, New South Wales and the Northern Territory. These schools were identified as ones in which programs had been introduced to enhance the literacy development of Indigenous students. A group of Year 3 and Year 5 Indigenous students were targeted in each school. The students' principals, teachers, and Aboriginal and Islander Education Workers (AIEWs)[1] were interviewed by two Indigenous consultants about the ways in which they attempted to provide effective learning environments for their Indigenous students. As well, the students completed English literacy assessments which had been used in the National Schools English Literacy Survey (NSELS).

Findings from the study highlighted a number of teaching practices as ones which schools and teachers should consider when working with Indigenous students. These included: modelling standard Australian English and explicitly teaching children to code-switch between languages and dialects; understanding students' cultural and social backgrounds and being able to employ appropriate teaching strategies; providing training and support for AIEWs; and schools and parents working in partnership to provide environments where students could consistently attend and productively engage in educational opportunities. Findings from the study are reported in the ACER monograph *Enhancing English Literacy Skills in Aboriginal and Torres Strait Islander Students: A Review of the Literature and Case Studies in Primary Schools* (Batten, Frigo, Hughes and McNamara. 1998).

The Indigenous students in the study by Batten et al (1998) achieved at a higher level than a special sample of Indigenous students who had completed the assessments in the NSELS project (Masters and Forster, 1997), , which seemed to justify the selection of the 12 schools as ones in which successful teaching practices were occurring for Indigenous students. However, their achievement was, on average, lower than non-Indigenous students. This gap mirrors results which are reported in State-wide English literacy assessment tests; Indigenous students achieve at significantly lower levels than non-Indigenous students by the time they reach Year 3, the gap increases for many by Year 5.

The research data which reports on Indigenous students' educational outcomes is mainly cross-sectional and growth trajectories are implied by comparing the achievement of different cohorts at one point in time. It was felt that a longitudinal research project would provide a and more informative and richer picture of educational opportunities offered to Aboriginal and Torres Strait Islander students as they unfold.

Consequently, the ACER Aboriginal and Torres Strait Islander Education Advisory Committee suggested a longitudinal project which would follow one group of students from school entry through the early years of schooling and beyond. Accordingly, the ACER

[1] Within this paper, the abbreviation AIEW is used to refer to Indigenous people employed by schools in a para-professional capacity to support the education of Indigenous students.

Longitudinal English Literacy and Numeracy Survey for Indigenous Students was established in 2000 to:

- identify and monitor development in Indigenous students' English literacy and numeracy skills in the first years of schooling;
- to measure growth in English literacy and numeracy skills over time;
- and investigate the factors which may be associated with development of the child's English literacy and numeracy skills, including effective teaching and learning practices as well as factors beyond schooling.

The current paper provides an insight into the longitudinal study after two years.

**Methodology**

*Selecting the schools*

State and Territory Education departments were invited to nominate schools with more than five Indigenous students in their first year of schooling and which were acknowledged to have an explicit focus on supporting the learning of their Indigenous students in the early years. The final sample of 13 schools included sites in metropolitan, regional and remote areas of Australia, both large and small primary schools, and where Aboriginal students were sometimes in a majority or a minority. The students in the study came to school as speakers of Indigenous languages, Aboriginal English, Kriol and standard Australian English.

A sample of up to ten Aboriginal and Torres Strait Islander students in their first year of schooling at each of the schools were invited to participate. For schools that had more than ten Indigenous students in their first year of schooling, ten were randomly selected to participate. In 2000, the first year of the project, data was collected from a total 119 students. In 2001, the second year of the project, a number of students had moved and schools were invited to 'refresh' the sample where numbers in the study had dropped significantly. After the second year of the study, data had been collected from 147 students and 36 teachers. Mobility and attendance issues and the non-return of a set of assessments by two of the schools meant that only 37 of the students had completed all four assessments; however, 98 of the students completed more than one assessment point.

*Collecting and analysing the data*

The design of the study as a longitudinal one was intended to paint a picture of individual growth in English literacy and numeracy skills across time. Both qualitative and quantitative methods were used to collect data for the study. A series of assessment tasks provided an indication of the students' skill development, while case study visits to the schools enabled an exploration of the teaching and learning environments in which students developed these skills. The identification of effective school and teaching strategies was supported by evidence of growth in educational outcomes. ACER was responsible for coordinating the project and the English literacy and numeracy assessments, while a team of Indigenous researchers conducted the fieldwork.

*Quantitative data*

Assessment tasks developed and used in the ACER Longitudinal Literacy and Numeracy Survey (LLANS) were used to provide a measure of English literacy and numeracy skill development. These tasks are set within a framework of developmental assessment and are sufficiently linked to allow student performance be reported on a common scale within English literacy and numeracy (Anderson and Meiers, 2001).

The LLANS assessment tasks were chosen for this project as being consistent with good assessment practice for Indigenous students: they are designed to take place in a meaningful context, based around familiar classroom activities, administered on a one-to-one basis,

include many hands-on activities that use familiar classroom materials, they emphasised process as well as product and are in line with State/Territory curricula. The Indigenous Parent-Liaison Officer who administered the assessment at one school described them in these terms:

> *The way the tests are set out is basically straight forward and the kids enjoy doing it...There's two girls and one boy who don't like change around them. They are used to me and they think the testing is fun so it's not a stressful situation for them. We come in, we play, we sit there, they see me give them a tick. I tell them at the start, "I'm gonna give you a tick beside your name." So they think it's a game and it is. It's having that person they identify with. The majority aren't my relations but they all call me "Aunty", and it's a first name basis with me with the kids. They're relaxed...its fun, it's a game...*

The assessment tasks were administered at the beginning and at the end of each year in the first two years of the study. The children worked one-on-one with, in most cases, either their teacher or AIEW who recorded their responses in booklets that were returned to ACER for data analysis.

The broad aspects of English literacy investigated in the first two years included phonemic awareness, concepts of print, reading fluency, making meaning from text, and writing. Picture story books provided a context for activities relating to the child's understanding of text, and to prompt writing tasks. The numeracy tasks focused on skills in number, space, measurement and chance and data. Each assessment comprised 5-6 short units, each consisting of approximately eight questions of a range of difficulty.

*Qualitative data*

Each school was visited by a member of the research team on a number of occasions (from two to four days each year) and information was collected about the school, the students' classroom environments and their communities. Data were collected through questionnaires, interviews, school documentation, and classroom and playground observation. The researchers who visited the remote schools in the project both had family connections with the local communities.

The *questionnaires* enabled a consistent collection of background data across schools. Principals provided information about the schools' student population, curriculum and teaching programs. Teachers provided information about their experience, training and professional development. They also provided information about each student's language background, pre-school experience, attendance, attentiveness in class and general achievement.

The *interview schedules*, developed and discussed by the research team and sent to school prior to the school visits, facilitated a consistent approach to school visits between researchers and across sites. Interviews with principals, teachers and AIEWs aimed to explore how Indigenous languages and cultures, English literacy and numeracy skill development, and student participation is supported at the school. Some of the key areas discussed included:

- recognition of Indigenous cultures in curriculum, pedagogical practice, and assessment procedures;
- teachers' understanding of the ways in which their students learn, pedagogical practices and beliefs;
- the extent to which teachers and AIEWs are supported and encouraged to engage in training and professional development;
- the ways in which AIEWs work in classrooms and with their local communities; and
- the ways in which the school and individual teachers have established partnerships with local communities.

Each researcher wrote detailed reports on their school visits which were returned to ACER for analysis, along with questionnaires which had been completed at the schools and in some instances notes, tapes and transcripts. Significant themes were identified and analysed alongside the quantitative data collected through the assessment tasks.

**Results**

All of the schools in the project were government schools with at least one from each State and Territory: two were located in very remote areas of Australia, six were in large regional centres and five in metropolitan areas (capital cities). All of the schools had at least five Aboriginal and/or Torres Strait Islander students in the first year of schooling in 2000; however, proportions of Indigenous students compared to non-Indigenous students varied greatly across the schools (between 5% and 100%). The majority of the students in the study were born in 1994.

A summary of some of the characteristics of all of the schools is presented below in Table 1. All participants in this study were guaranteed anonymity; consequently, none of the schools are identified by name or region. ACER's Advisory Committee felt that the intention should be for the reader to focus on the issues and themes raised rather than particular locations.

**Table 1: School background information reported in 2000**

| School | Area | Sch Popn | Ind % | Ind LBOTE[2] % | LBOTE % | Literacy approach | Numeracy approach |
|---|---|---|---|---|---|---|---|
| 1 | Regional | 500+ | 61+ | 21-40 | 11-20 | Walking Talking Texts, Reading Recovery | Concrete activities; focus on language |
| 2 | Regional | 309 | 41-60 | 21-40 | 1-5 | 1st Steps; ESL strategies; Reading Recovery | Rigby resources with hands on support |
| 3 | Metro | 731 | 6-10 | 0 | 21-40 | Early Years Literacy Prog; Reading Recovery | Count Me in Too K-1 |
| 4 | Regional | 370 | 41-60 | 6-10 | 1-5 | 1st Steps | State curriculum |
| 5 | Regional | 409 | 21-40 | missing | 0 | Early Years Literacy Prog; Reading Recovery | State curriculum |
| 6 | Remote | 255 | 61+ | 61+ | 0 | Walking Talking Texts | State curriculum linked with literacy |
| 7 | Metro | 268 | 21-40 | 0 | 0 | PASS, Spalding & Reading Recovery | State curriculum |
| 8 | Remote | 75 | 61+ | 61+ | 0 | ESL based; also 1st Steps and the Early Years Literacy Program. | Practical with emphasis on Mathematical literacy. |
| 9 | Regional | 80/ 445 | 21-40 | 1-5 | 1-5 | 1st Steps; Reading Recovery | State curriculum amended to local context |
| 10 | Regional | 43/ 220 | 21-40 | 1-5 | 21-40 | 1st Steps; Gateway to Literacy (inc phon. awareness', motor sensory devp); ESL | State curriculum with Rigby resources |
| 11 | Metro | 100 | 11-20 | 0 | 1-5 | 1st Steps; Yerrabi Pathways (social skills program) | Based on NSW signpost |
| 12 | Metro | 415 | 11-20 | 11-20 | 21-40 | 1st Steps; Reading Recovery; Scaffolded Literacy Program | State curriculum guidelines |
| 13 | Metro | 274 | 21-40 | 21-40 | 11-20 | 1st Steps; strong oral language component. | Hands on, concrete materials, activity based program P-3 |

[2] LBOTE stands for Language Background Other Than English



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The areas in which the thirteen schools in the study are located all have significant local Indigenous communities. Many of the areas are described as economically depressed with high unemployment rates and a significant proportion of both single parent and highly transient families. Transience is attributed to employment, housing needs and moving on from situations of domestic violence, as well as Indigenous cultural reasons. These aspects of the local communities were commonly mentioned by the school principals when asked to describe their respective school populations. It is acknowledged, however, that there is also considerable variation in the extent to which families fit this profile, both Indigenous and non-Indigenous families.

A number of the communities were also described as multicultural, with significant numbers of families coming from a range of cultural and linguistic backgrounds, both non-Indigenous and Indigenous. For example, some of the Indigenous families were long-term residents of a town across a number of generations while others had recently arrived more recently from more remote areas. There was also diversity within Indigenous communities in the number of languages and dialects of English spoken. These included standard Australian English, Aboriginal English, Kriol and Indigenous languages.

*Student achievement*

Performance on the assessment tasks were reported using the scales developed for the LLANS study. A property of these scales is that both student performance and task difficulty can be expressed on the same scale as they share a common unit of measurement.

The distributions of student achievement shown in Figure 1 demonstrate the range of achievement in English literacy for both the Indigenous students in this study and the students in the LLANS study. The mean achievement score of the Indigenous students is noticeably below that of the main LLANS cohort for all but the first assessment point. The emerging trend appears that the rate of growth appears to be slower for the Indigenous sample than the LLANS sample. While the distribution for the Indigenous students appears greater, this may be due to the much smaller sample size. The distribution also varies between assessments but may be due to the high mobility of the sample.

A noticeable difference in the growth pattern is that the greatest growth point for the main LLANS sample is between assessments 1 and 2 (13 points on the scale) and assessments 3 and 4 (10 points on the scale). The growth points for the Indigenous students as a whole did not increase as markedly at the same points.(see Table 2).

**Table 2 English literacy and numeracy achievement across four surveys for the main LLANS cohort and the Indigenous sample: mean scores and standard deviations**

| | Survey 1 | | Survey 2 | | Survey 3 | | Survey 4 | |
|---|---|---|---|---|---|---|---|---|
| **Literacy** | *Mean* | *SD* | *Mean* | *SD* | *Mean* | *SD* | *Mean* | *SD* |
| Indigenous Sample | 48.8 | 14.6 | 55.2 | 13.1 | 59.9 | 17 | 65.2 | 12 |
| Main LLANS cohort | 47.4 | 13.2 | 60.4 | 13 | 66.4 | 11.5 | 77.2 | 10.8 |
| **Numeracy** | | | | | | | | |
| Indigenous Sample | 48.7 | 16.5 | 60.3 | 10 | 68.1 | 10.4 | 71.8 | 11 |
| Main LLANS cohort | 55.4 | 16.4 | 73.8 | 13.6 | 74.8 | 10.4 | 80.7 | 10 |

*Figure 1*

# Longitudinal Literacy and Numeracy Study (LLANS)

## LITERACY SCALE DESCRIPTION & NORMATIVE DISTRIBUTIONS

**Note:** *The indicators listed on this side of the scale have been derived from the tasks completed in the LLANS assessments. Only a selected sample of these indicators has been used to describe developing achievement in literacy.*

Writes a variety of simple sentences; selects and controls content of own writing. Listens to a text and infers the reason for an event without picture clues.
Uses full stops and capital letters to separate sentences. Identifies the purpose of parts of a text (eg, glossary, caption).

Listens then gives a comprehensive summary of a picture story book or reader.
Reads aloud with word-for-word accuracy an early reader that develops a complete factual account with some support from illustrations. Connects some ideas in own writing. Segments or blends four phonetically regular syllables in an unfamiliar word. Manipulates beginning, middle and end sounds in short words to make new words.

Reads many irregularly spelt words (eg, *would, because*). Spells many words correctly in own writing. Listens to a text and connects pictures and text to explain events.

Reads a short text to locate explicitly stated information. Uses '*and*','*but*' or '*then*' to join ideas in a sentence. Names and describes the purpose of common punctuation marks.

Reads aloud with moderate accuracy an early reader that portrays a predictable event with extensive repetition of phrases.
Explains explicitly stated ideas in short narrative and factual texts. Lists simple ideas in own writing.

Generates a word that rhymes with a given word.

Uses simple sentences in own writing. Writing includes many unconventional spellings that are phonetically plausible. Listens, then gives a relevant detail from a narrative or factual text.
Matches the same first sound or the same rhyme in 2 of 3 words in any order. Reads some common words (eg, *do, little, are, from, one*). Identifies beginning, middle and end sounds in regular one-syllable words. Predicts a story from the cover of a book. Names and describes the purpose of a full stop.
Writes some recognisable words. Reads a few common words (eg, *you, my, and, the, is*). Sounds and names at least 10 alphabet letters.

Indicates correct direction for reading.

Writes own name correctly.

Uses clues from pictures to connect events.

Distinguishes a letter from a word.

Expresses own meaning using unconventional writing.

Locates the front of a picture story book. Identifies a word.

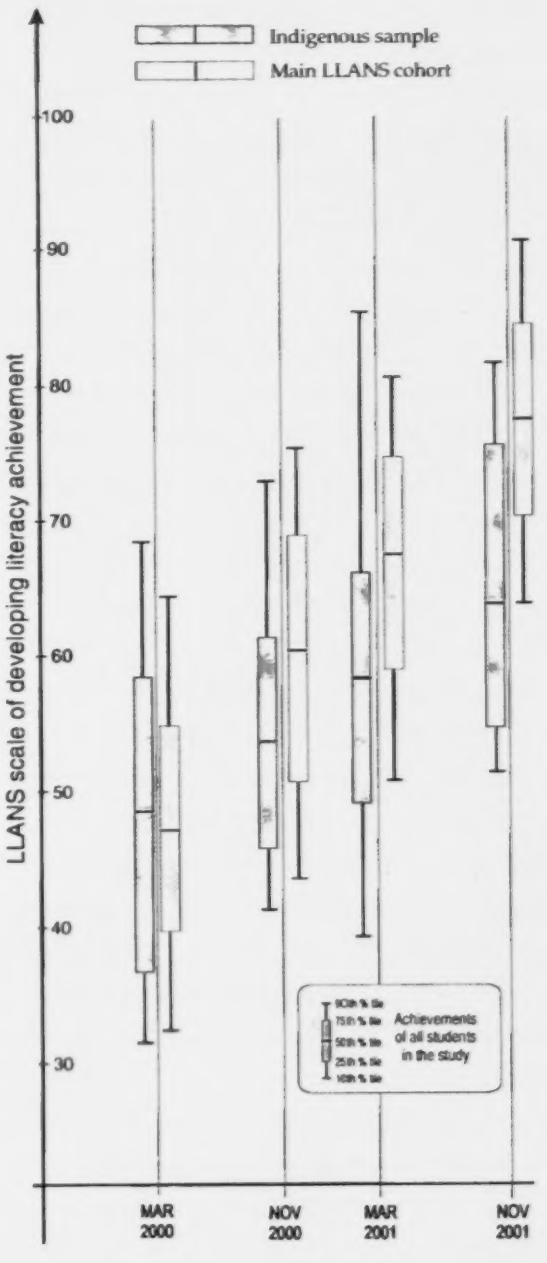


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*Figure 2*

# Longitudinal Literacy and Numeracy Study (LLANS)

## NUMERACY SCALE DESCRIPTION & NORMATIVE DISTRIBUTIONS

**Note:** *The indicators listed on this side of the scale have been derived from the tasks completed in the LLANS assessments. Only a selected sample of these indicators has been used to describe developing achievement in numeracy.*

Counts forwards by tens to 150, forward by twos to 24 and back from 24 by ones.

Reads cents and dollar-cent combinations, and identifies highest values. Calculates *how many more* when comparing 2 unequal groups on a graph. Given units for one side of a square, calculates units for all sides.

Applies counting by tens or fives to collections structured *in* groups of ten or five. Identifies where to cut to share equally for shapes with one line of symmetry.

Selects 2 *different* ribbons from a collection of 4 that combine to match the length of a given object. From a collection of 6 objects, estimates which one *matches a short length*. Uses a path on a plan to explain an event. Constructs a square and a triangle with multiple units per side. Counts forward by tens to 100.

Estimates the number of units required to measure a *short length*.

Identifies same sized groups on a bar graph (not adjacent). Given a sorted collection, generates a criterion for an alternative sort.

Cuts a circle to *share equally* between 4 people.

On a bar graph, identifies the number of items in one group and combines data from 2 groups. Selects and checks that a 'ribbon' matches the length of a given object (eg. side of a book).

Recreates an arrangement of tiles on a grid (eg., 12 tiles on a 4 x 4 grid). Names a *rectangle*. Counts forward by ones (not starting at 1) for numbers under 100. Identifies fourth in a line. Reads 2-digit numbers. Adds and subtracts numbers under 10 without given materials.

Counts collections under 30.

Displays sorted objects as a pictograph and adds an item to graph. Constructs a square and a triangle using one unit per side. Identifies the object that is *closest to* a specified object on a plan.

Places repeated units appropriately to measure length. Identifies the number of items in one group of a pictograph. Counts collections under 20. Identifies ordinal positions up to a *third* and places an object *last* in line. Says the number *before* - up to 10, and the number *after* - up to 20. Counts forward by twos to 12 and counts back from 10 by ones. Ranks by length in collections of up to 6 objects. Halves practically (eg., Cuts a circle, folds a ribbon). Follows arrows on a path on a plan. Identifies the *largest* and *smallest* by length in collections of up to 7 with objects and from graphs. Generates own single line repeating pattern. Counts forward to 20 and counts back from 5. Writes single digits. Shares, adds and subtracts using given materials with collections under 10. Recognises prices; identifies a one dollar coin from a mixed coin collection.

Identifies a different and a shared attribute of 2 objects. Positions an object relative to other objects using a range of everyday terms (eg. *on top of, in front of, behind*, etc.). Sorts objects by a given criterion. Names a *square*; names a *triangle*.

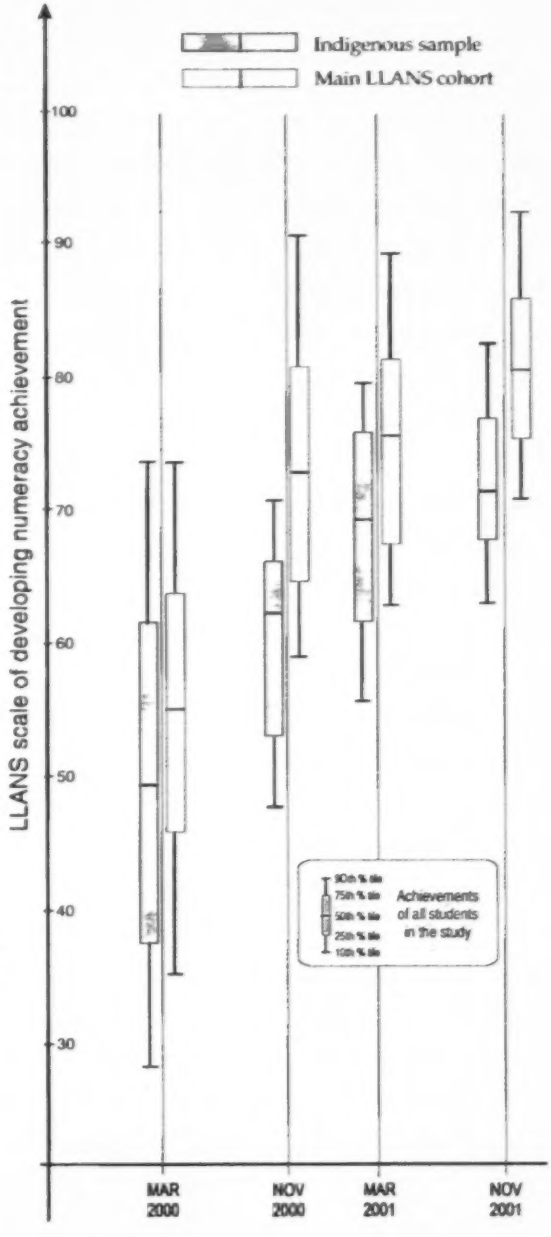
Recreates a single line repeating pattern (ab, ab). Identifies a different attribute of 2 objects.

Counts collections under 10.

Identifies *first* in a line. Reads numbers under 10.

Compares objects according to size, colour and shape.

Counts forward to 10 by ones. Names a *circle*.

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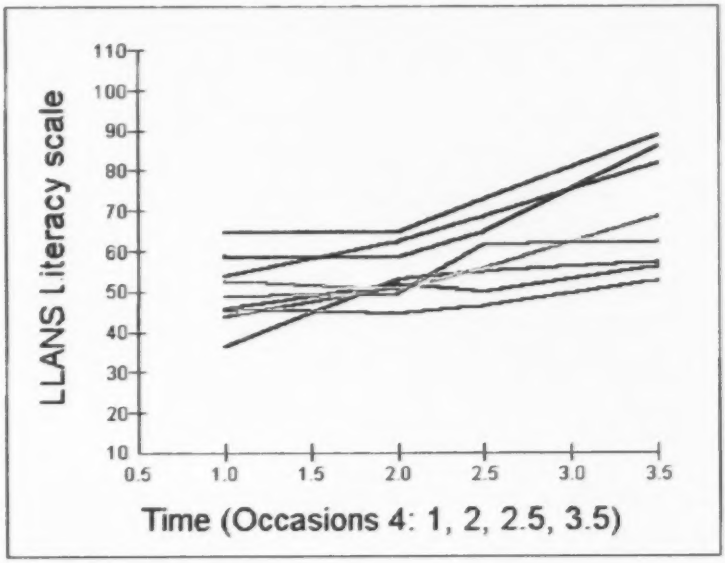
As with the range in English literacy achievement, the normative distribution for numeracy achievement (shown in Figure 2) reflects a wide range of abilities. In contrast to the Indigenous students' English literacy achievement , the distribution of scores for numeracy appears to decrease over time. This trend is similar, although to a lesser extent, to the distribution of scores for main LLANS sample. There is a larger growth point in numeracy for the Indigenous students between assessments 2 and 3 (8 points), than for the non-Indigenous students (1 point) from the end of 2000 to the end of Term 1 in 2001.

*Student-within-school profiles*

In addition to analysing the achievement of the sample as a whole, individual school profiles were generated and display growth trajectories for each student. The variation between students results in some interesting patterns in school profiles (see Figures 3 and 4).



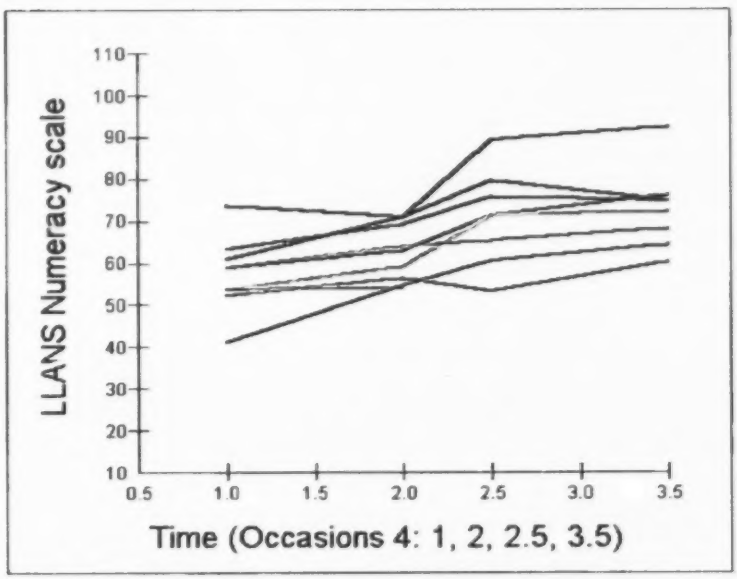
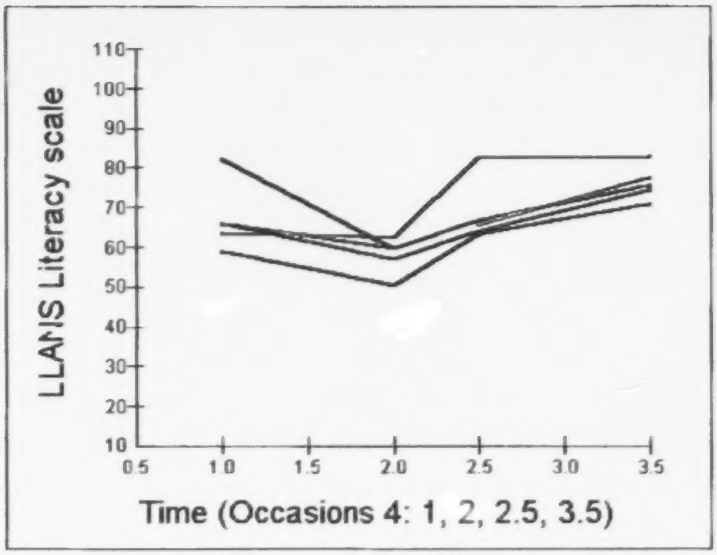




*Figure 3 Student-within-school growth trajectories for literacy and numeracy – School 9*



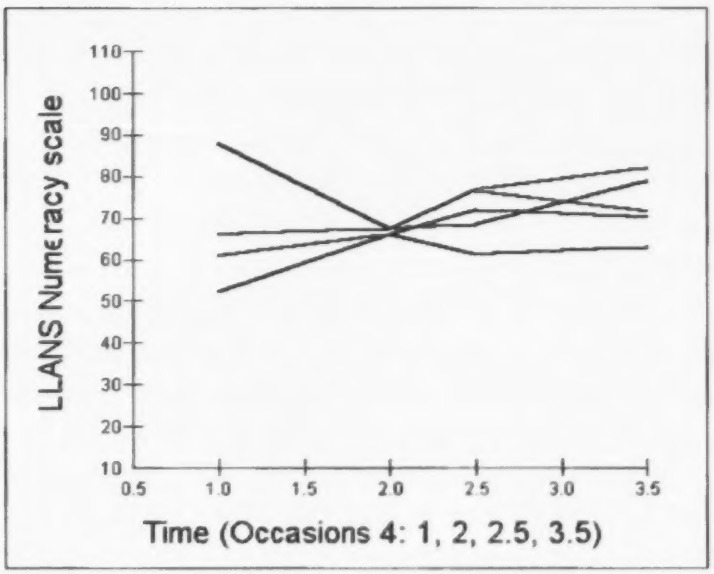




*Figure 4 Student-within-school growth trajectories for literacy and numeracy – School 10*

The school profiles which were developed for all of the schools in the sample differ; some in quite marked ways. The school profile presented in Figure 4 shows a lower achievement on the English literacy assessment at the end of the first year of school when a number of the students moved from the Transition year to a more structure learning environment. In a number of instances, individual student achievement on the numeracy assessment was higher compared to the English literacy assessment, particularly for students who spoke a language or dialect other than standard Australian English at home.

Whilst one could speculate on the factors which may be related to these differences, it is the collection of the qualitative data about the schools, teachers, the students and their learning experiences that enable the quantitative data to be explored in an informed way. Some of this data are presented in the next section of this paper.

**Learning environments which support Indigenous students**

The following section presents some of the qualitative data, from an Indigenous perspective, which reflects practices that support Indigenous culture and effectively engage young Indigenous students in learning, particularly in the areas of literacy and numeracy. Two of the schools *(School 1* and *School 9)* are used as to illustrate these practices; both having reported significant increases in the proportion of Indigenous students in the school population since the commencement of this study.

*School 1* is situated in the suburb of a large regional centre in which a significant population of Aboriginal and Torres Strait Islander families live. The community is considered to be in the low socio-economic category, with many unemployed and single parents and blended and extended families who live in low cost or state housing. The area is undergoing a rejuvenation programme, which includes the renovation of state housing. The Indigenous families who live in the area are mostly urban, although there are some families who have moved from remote communities to settle in the area and speak Indigenous languages at home. Many families speak a number of languages including standard Australian English, Aboriginal English, TSI Kriol and Indigenous languages. This school has one of the largest Indigenous populations in a large rural town. Four or five years ago Indigenous students were in the minority at this school but in 2002, 78% of the school's 530+ students are Aboriginal and or Torres Strait Islander students.

The Indigenous parents who send their children to *School 9* view it as the best government school for Indigenous students in the area, with some students travelling to attend the school from other suburbs. The school is located in one of the northern suburbs of a regional centre; in 2002 almost half of the school's 500+ students were Indigenous (an increase since 2000). The wider school community is a diverse mixture of cultural groups and families come from a range of socio-economic circumstances. Many of the Indigenous families are long time residents in the area although some have moved from remote communities to settle there. While the majority of students speak standard Australian English as their first language, many also speak Aboriginal English, TSI Kriol and Indigenous languages. The Principal, called 'Uncle' by many of the Indigenous students, has a long experience in the education system, an innovative and progressive approach to the administration of the school, is a strong advocate for Indigenous students, families and staff, and is a popular local identity, personally known to many Indigenous families both through the school and socially.

*Indigenous culture*

All of the schools in the study varied in the extent to which Indigenous people and cultures were apparent to an outsider. On a broad level, many of the schools displayed the Aboriginal flag (and one displayed the Torres Strait Islander flag) along with Indigenous artwork, books and posters with Indigenous themes. Cultural recognition in this general sense was appreciated and valued by the local community and parents. All variously employed AIEWs, Indigenous ATAS tutors and Indigenous teachers and one had an Indigenous principal.

Both *Schools 1* and *9* had a strong and visible Indigenous presence around the school, particularly with respect to the numbers of Indigenous people employed at the schools. Some years ago there were plans set in place at *School 1* to increase the Indigenous presence at the school so that the children would see familiar faces and hear familiar languages. Currently, there are four Indigenous teachers, one Indigenous preschool teacher, 10-12 ATAS [3] tutors and other non-teaching Indigenous staff.

The Indigenous presence and level of engagement in *School 9* was also apparent through Indigenous staff in the tutoring program, the homework centre, an active ASSPA committee

[3] Aboriginal Tutor Assistance Scheme (Commonwealth funded program)

and four Indigenous parents on the School Council. The AIEW, also a School Council member, keeps a close check on attendance, liaising regularly with families and compiling statistics on Indigenous students every 4 weeks. In the time of the current principal, the enrolment of Indigenous students had increased significantly, as have Indigenous programs and events, and the number of Indigenous staff now includes nineteen teaching and non-teaching Indigenous staff.

> *I think we're lucky in that our employees here have a vast knowledge of the family structures, how the families relate to one another. A lot of families in this school are related to one another, and I thinks that's very important in dealing with them..*

On the day of the visit to *School 9*, at the invitation of the Principal, the researcher attended a presentation of Torres Strait Islander (TSI) song and dance by a group of Year 10 high school and Year 1 primary school students. The Indigenous and non-Indigenous secondary students from the high school had been teaching a group of Indigenous students from Year 1 at the primary school a selection of songs and dances of the Torres Strait Islands as part of a high school unit on cultural studies. As a component of the project, the Year 1 students were also taught to read in TSI Kriol, by parents and members of the TSI community at the school. As part of the presentation, each Year 1 student also read a short story in TSI Kriol.

*Literacy and Numeracy programs*

In line with current Commonwealth, State and Territory policy initiatives, all of the schools had prioritised programs and professional development to lift the literacy achievement of their students. The most commonly mentioned literacy programs were *First Steps*, *Walking Talking Texts* and the *Scaffolded Literacy Program*. Numeracy programs were generally described by referring to *State Curriculum Guidelines* and the *Rigby Maths 2000* [4] program. One of the schools was using *Count Me In Too,* developed in NSW. While teachers reflected on a variety of approaches to literacy, they were fairly uniform in reporting that their approach to numeracy was to include plenty of hands-on, concrete activities, many of which related to students home lives.

Most of the teachers who responded to the questionnaires conducted a literacy block during the first part of the morning and most followed this with a numeracy block. Inevitably, those students who consistently arrived late to school would miss a number of the literacy blocks each term. A different approach had been adopted at *School 9* where teachers began the day with a 1.5 hour numeracy block and followed this with a 2 hour literacy block.

In the wider sample of schools, teachers' knowledge and understanding of the language backgrounds of their students, particularly of non-standard Australian English, varied considerably, as did their views on how this influenced their teaching strategies. A significant influence on the teachers' awareness of students' language backgrounds in *School 1* was a non-Indigenous teacher who had considerable experience working with remote communities. The esteem in which this teacher was held was apparent –when an Indigenous parent spoke of the impact that she had in the school…

> *she's brought a lot of stuff into the school. She's gone into the classrooms with them to learn about different languages that you know – you know some kids go into a classroom and they have 3 different languages that they know, and – its just been wonderful to actually see her, a non-Indigenous person, taking an interest, and she loves what she does. And the kids – she comes up with games and with stories, and the parents like talking to her, 'cause like she's always asking them to like to come into the class and to sing songs and to do games with the kids, and she's trying to get, you know, parents involved and the elders as well.*

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[4] An activity based maths program with activity/assessment books for all primary years

...as did an ATAS tutor

*she also has gone into classrooms and explained to children that they're – different children speak different languages – she worked very well – encouraged the children to speak up and tell the teachers if they speak a different language at home, and if they do speak English or Kriol or whatever. And its amazing how the children are now more open in saying - what they do speak at home.*

...and a non-Indigenous teacher.

*...the recognition of the child's first language is very important – that its recognised and valued. At our school we have, as I said earlier, a teacher that comes in. She makes an oral language chart with the children and they're asked to talk about their language, what they would say at home, how they would say certain sentences at home – how we'd say it in the classroom. So what we do is showing them that language is something very important, and we use language outside, we use language in the playground and in the classroom. Language that they use at home is valued and its correct, but when they come to school, because this is the language of the school environment, we show them the difference.*

*School-community links*

The involvement of Indigenous parents and communities in schools is regarded as an important strategy to enable a smooth home-school transition, ensure cultural inclusiveness in school curricula and teaching practices, encourage student attendance and enhance opportunities for success for Indigenous students.

On a formal level, all of the metropolitan and regional schools had Aboriginal Student Support and Parent Awareness (ASSPA) committees which contributed to the school through a range of initiatives such as breakfast programs, providing school uniforms, purchasing resources, organising elders to visit the schools, running homework centres and fundraising. The school councils for the remote schools were all Indigenous. As well, Indigenous parents and community members were invited to parent-teacher nights, sports days, activities organised as part of NAIDOC [5] week and school reading programs.

Some parents are not involved with the school, often due to time commitments, sometimes due to a lack of confidence or uneasiness which may have resulted from their own school experiences. Teachers who recognised this reality stressed the importance of finding other spaces to engage in one-on-one communication with parents. Their conversations occurred informally at drop-off/pick-up time, in the playground, the local sports club and elsewhere around the town. The principal at *School 9* reflected on his approach:

*The Principal's office is used as a workplace – nothing more, nothing less. I don't interview parents in there, I don't interview kids in there, because I think we need to realise that a lot of the parents have particular hangups about Principals' offices, from when they went to school themselves, as places of authority and places of pain...it puts me at an unfair advantage to be asking the parent to come in there because the chances are that they work themselves up into a pretty fair frenzy to even come up to the school.*

A parent from *School 1* gave the following example:

*if they had a general idea of the type of families that these kids come from, you know, it might just open their eyes just a little bit more to what the needs of these kids actually are...you try to explain to them that at home, you know, you've Mum and she's got 4 other kids that are small at home, and they've got this one here, you know. And this little boy has to grow up so quickly 'cause he's got to look after his younger*

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[5] NAIDOC stands for National Aboriginal Islander Day Observance Committee (Commonwealth funded program)

*brothers and sisters, and he's not going to be doing his homework as well as what he could be, because he's got to grow up really quickly to be the man of the house, you know - he might only be 8 or 9 himself.*

In a couple of schools, researchers developed strong impressions that teachers had little contact with their Aboriginal students beyond the class/school boundaries. However senior staff at both *Schools 1* and *9* worked hard to make staff aware of the relationship between the diverse cultural contexts of their Indigenous students and the school learning environment. An ATAS tutor at *School 1* described the following initiative undertaken by the same teacher referred to in the above section:

*we actually went into the community and had a class a few times. A lot of these children have lived in X Street...they have a hall there...and we walked with the children or with a bus took us there to the hall and we had a day out in the community. Twice we went and we had a couple of the parents come down 'cause they knew we were there – come down to watch their children – work at the hall. I think that was probably Dads mainly because that was sort of going to bridge into the community and where the parents are to feel – I think less threatened by a different culture...I think just to encourage them to – I think to let them know – the parents know that they're – they are a very positive force in their education and that we can often learn from the...*

and a relationship with the Indigenous community and one based on respect.

*I think the reason for our success here is based largely on respect. If you want respect, you've got to give respect first. If you want understanding, you got to be understanding of the problems. Once the home gets that message that the families are very welcome, a lot of the problems sort of fade away...It's very important that the principal is seen as a friend who reaches out and, if the community can't be drawn into the school, the school reaches out and get drawn into the home, and it seems to have worked here. It's a long time since I had an irate Indigenous parent at the scene - because Bingo helps too (the principal is the local Bingo caller).*

And some final comments from members of the two communities:

an Indigenous parent from *School 9*...

*The principal educates teachers. We have a school pamphlet on dealing with Indigenous issues. If there is a problem at home, the Indigenous staff will go around and find out what it is. There's no racism at the school. The playing field has been levelled. The kids are equal, they know they are equal... The school is a safe house. There are nutrition programs for kids who don't get lunch. Kids are comfortable and parents know if they have a problem, they have Indigenous staff to help.*

... an ATAS tutor from *School 1*

*As an older person, I'm very happy that this is how education's gone because I think – as I said I am an older person and I have seen Indigenous children just getting left behind in previous years because there wasn't this interest, and I'm very happy. I've seen both Indigenous and non-Indigenous staff at school take the extra mile to help these children....they're very happy now.*

...and the principal from *School 1*

*If you set your standards high, they'll [the students] try to reach them, but if you set mediocre standards, they'll reach them too – they're eager to please.*

**Future directions**

Currently, plans are underway for a fourth year of data collection and there are plans for the project to continue beyond 2003. Further analysis of the data will include using multilevel modelling techniques in an attempt to identify schools in which students have significantly different growth rates to students from other schools (after controlling for other known variables that effect student performance). Of particular interest are student language background (including non-standard Australian English), pre-school experience, mobility and school attendance. The performance of students on individual tests items and the relationship between literacy and numeracy will also be explored.

Case study visits to the schools will continue to explore the learning needs of the Indigenous students from the perspectives of the Indigenous research team, documenting successes as well as some of the factors that militate against success. It is hoped that in sharing the stories and insights of the participants, the findings from the study will make a significant contribution to improving educational outcomes for all students from diverse cultural and language backgrounds

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